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Minutes of the Berry's Creek Technical Advisory Group Meeting
June 11, 1985

The fourth meeting of the TAG took place at the Hackensack Meadowlands Development Commission Environment Center in Lyndhurst. The following people were in attendance: Hank Garie (DEP), Richard Dime (DEP), Bob Will (Corps, NY District), Dick Lee (WES), Paul Galluzzi (HMDC), George Harvell (Velsicol), Fred Ziegler (Morton Thiokol), Larry Schmidt (DEP). Also in attendance were Joe Maher (DEP), Jim Orr (ERM/Southeast) and John Ciancia (EPA, Region II). The meeting was called to order by Larry Schmidt shortly after 10:00AM. The minutes of the May 2 meeting were approved as drafted.

The TAG members commenced with a discussion of the document distribution and review system as it is currently being used. The following suggestions were made in order to facilitate reviews:

1. Communications by phone in response to documents under review will be recorded on a phone log (specifically by ERM with regard to Task I) and then sent back to the commentor with a carbon copy to Larry Schmidt.
2. Review documents received by Larry Schmidt will be hand-carried interoffice mail to Hank Garie, Richard Dime, and Joe Maher.
3. Unless otherwise specified by the originator of the document, there will be a three week turn around in commenting on all review documents.

Jim Orr was asked to summarize the status of Task I. He first indicated that review documents numbered one through ten have been incorporated into documents 13, 14, and 15, which are still open for review. However, document #13 has been resubmitted in a Final Draft form. At the TAG meeting documents #17-21 were submitted to TAG members by Jim Orr for review and comment by June 28. A separate mailing would be made to Art Slesinger since he was not in attendance.

The TAG members agreed that if a submission was made as a first draft, it would be resubmitted to TAG after comments were received as a final draft. However, there could be one exception. If there were no substantive comments on the first draft, the document could be resubmitted as a final (deliverable) with the concurrence of the Executive Secretary. The TAG also agreed that minor changes between first drafts and final drafts should be addressed in a cover letter or a summary at the front of the document so that the reviewers could avoid duplicative reviews on documents with no substantive changes.



The TAG members projected completion of Task I by the end of July. It was agreed that the preparation of the RFP could take place at the same time that Task I was being finalized. Fred Ziegler and Joe Maher volunteered to prepare the first draft of the RFP which will be completed sometime between July 15-31.

The group agreed that written comments will be required on the remainder of Task I documents (phone in comments will be accepted provided that they are followed up with written comments to the originator and to the Executive Secretary).

The TAG shifted from the procedural aspects of reviewing documents into substantive issues associated with Task I. Rich Dime commented that he saw very few recent entries in the general review of literature. The group speculated that this may be attributable to a time lag in getting research published. Dick Lee questioned ERM on whether or not it looked for abstracts from recent PhD theses. Jim Orr indicated that one of his employees had looked for this type of document. Dick Lee further indicated that ERM had thus far done a good job in screening the literature.

The TAG then began discussing the status of Task IV Research. Hank Garie outlined the various approaches that would be available for Task IV. They included:

1. Contracting with New Jersey academic institutions
2. Contracting directly with WES
3. Incorporating research into the major consulting contract
4. Contracting directly with the Oak Ridge National Laboratories

Fred Ziegler said that the Oak Ridge National Laboratories has the capability and the interest, but would need at least one year's lead time to start the research. Hank Garie indicated that the research could be done by another government agency through a waiver in the State's procurement process or we could contract directly with a New Jersey academic institution. However, if we were to contract with an outside consultant, a RFP would have to be drawn up and DEP would have to follow the State's procurement procedures, a lengthy process.

Fred Ziegler suggested a combination of WES and New Jersey institutions provided that the research is tied together through close coordination.

Dick Lee expressed concern that academic institutions could only give us little pieces of what was necessary but not the big picture. He continued by saying you get what you pay for and a modest effort in support of a graduate student may not be sufficient in this case.

The TAG generally agreed that WES had all of the professional credentials and experience to tackle the research. After questioning by the TAG, Dick Lee indicated that WES may have the time to conduct the research work in the next fiscal year (after October 1985). Dick agreed to prepare "time and scope" outlines based on the four areas of research that had been identified by the TAG. Dick Lee further indicated that if WES was to become involved, the cost of the research may be more expensive than what is allocated in the current budget. Hank Garie responded by indicating that the SAC would make research dollars available through a re-allocation if the research is deemed necessary and important.

Bob Will explained the formal mechanism to request assistance of WES in this matter. It was agreed that a letter would be sent to the New York District outlining the research elements and requesting the assistance of the Corps in addressing the issues. The New York District would, in turn, contact WES to determine its availability and interest. WES would also need clearance from the Corps' Headquarters Office in Washington to get a determination that this research would be considered special, and not something that would compete with private sector capabilities. It was agreed that the TAG would follow the Corps procedure and that Dick Lee would informally provide the TAG with "time and scope" information on the research.

Larry Schmidt asked the TAG members to formally endorse the four areas of research necessary to complete Task IV. The research questions are as follows:

1. The role that the marshes play in the migration of mercury. This includes, but is not limited to, determining transport mechanisms in the marshes and creek, uptake and translocation of mercury by vegetation, fate of detritus, and determining net changes in the marsh over the past 30-50 years. Examples of potentially applicable techniques include; sediment core dating, estimating the net gain or loss of detritus, determining the bioavailability of mercury from vegetation.

2. Factors affecting mercury methylation and migration in Berry's Creek. Although there is substantial literature pertaining to mercury methylation, we are interested specifically in Berry's Creek, and evaluating changes in bioavailability and methylation potential due to alterations in chemical parameters such as dissolved oxygen, pH, salinity, redox potential etc.

3. Factors affecting the biological availability of mercury to other aquatic organisms. Under changing environmental conditions such as: increases in dissolved oxygen, salinity changes, redox potential changes, sediment disturbances (continuous suspension, coverings) assess changes in biological availability with changes in bioavailability, and allow quantification of changes and/or determine rates of change.

4. The potential for mercury to volatilize from the marshes, or from exposed mudflats. This investigation should include, but not be limited to determining the rate and extent of volatilization under varying environmental (meteorological) conditions, and the form of the mercury volatilized.

The TAG unanimously agreed on the above cited areas of research and requested that the Executive Secretary convey this approval to SAC at its next meeting.

Paul Galluzzi asked if the TAG would ^{formally consider research study plan} reconsider his ~~proposal for research~~ on the fill material that has already been placed in wetlands by Richard Harries Inc. The TAG agreed to consider Paul's proposal provided that it was limited to the existing filled areas and in no way endorsed future additional filling. TAG members were given copies of Paul's proposal and it was marked as document #22. Comments on the proposal are due on June 28. The members of TAG agreed that the proposal may fit into a creative monitoring plan as opposed to just being a pure research effort.

The TAG looked back to Task I, Task IV and the status of the RFP and recommended that the SAC meeting scheduled for June 27 may be premature. TAG members unanimously agreed to have the Executive Secretary request at least a two week delay in the SAC meeting so that the above tasks could be further refined.

Hank Garie asked that the TAG discuss an ongoing and routine monitoring program for the Berry's Creek system. Hank Garie offered to design a monitoring program with the help of Fred Ziegler which possibly could include Paul Galluzzi's proposal and greater emphasis on monitoring of biota. Fred Ziegler observed that the monitoring plan should focus on issues rather than just gathering data. In this way, the monitoring could be better tied to future decision-making. Fred and Hank indicated that the first draft of the monitoring plan could be completed by the end of June.

The meeting concluded at approximately 3:00p.m.